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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|---------------------------|-------------------------|------------------------|
| 10/729,165 | 12/05/2003 | Krishna Prasad Chitrapura | JP920030160US1 | 8575 |
| 7590 Frederick W. Gibb, III McGinn & Gibb, PLLC Suite 304 2568-A Riva Road Annapolis, MD 21401 | | | EXAMINER VO, HUYEN X | |
| | | | ART UNIT 2626 | PAPER NUMBER |
| | | | MAIL DATE 05/03/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/729,165

Applicant(s)

CHITRAPURA ET AL.

Examiner

Huyen X. Vo

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2 sheets</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 8/12/2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because form 1449 is missing. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 10 and 12-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. Claims 10 and 12-28 are drawn to a "program" *per se* as recited in the preamble (*paragraph 45 of the specification defines that "storage device 455 can include a disk drive or any other suitable storage medium."* Thus, the claimed computer-readable

medium can be considered as a carrier wave, which is a non-statutory subject matter) and as such is non-statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-10 and 12-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Subasic et al. (US 6721734).

7. Regarding claims 1, 10, and 20, Subasic et al. disclose a method and computer program product, and computer system of analyzing expressed opinions comprising the steps of:

parsing words of at least one text-based document as parts of speech (*element 102 in figure 2 or col. 3, lines 18-35*);

extracting regular expressions from the document by matching at least one regular expression rule with the parsed parts of speech (*element 112 in figure 2, extracted POS is compared with entries of the lexicon 104*); and

categorizing extracted regular expressions into representative categories of semantic orientation by analyzing the words comprising the extracted regular expressions (*elements 114 and 106 in figure 2 or referring to col. 3, line 36 to col. 12, line 67*).

8. Regarding claims 2-3, 12-13, and 21-22, Subasic et al. further disclose the method, computer program product, and computer system of claims 1, 10, and 20, respectively, wherein extracted opinions are characterized by the polarity of their

sentiment into at least positive and negative categories (*referring to col. 3, line 36 to col. 12, line 67*), wherein the representative categories are identified as favorable, unfavorable and indifferent (*referring to col. 3, line 36 to col. 12, line 67*).

9. Regarding claims 4, 14, and 23, Subasic et al. further disclose the method, computer program product, and computer system of claims 1, 10, and 20, respectively, further comprising the step of graphically displaying the relative proportions of the differently categorized expressions (*computer system in figure 1 includes a display 5*).

10. Regarding claims 5-8, 15-18, and 24-27, Subasic et al. further disclose the method, computer program product, and computer system of claims 1, 10, and 20, respectively, further comprising the step of storing a collection of regular expression rules indicative of expressed opinions (*affect lexicon 104 in figure 2*), and comprising the step of associating expressed opinions with topics to which the expressed opinions relate (*affect lexicon 104 in figure 2*), comprising the step of accessing a natural language database to determine the semantic orientation of words of a regular expression (*steps 112 and affect lexicon 104 in figure 2*), and further comprising the step of accessing a lexical reference to identify possible synonyms or antonyms for words of a regular expression (*col. 5, line 66 to col. 6, line 7, thesaurus or synonym*).

11. Regarding claims 9, 19, and 28, Subasic et al. further disclose the method, computer program product, and computer system of claims 1, 10, and 20, respectively,

further comprising the step of determining a predominant connotation of an extracted regular expression by performing at least one of the following steps in relation to words of the regular expression:

- (i) determining the semantic orientation of the words (*referring to col. 3, line 36 to col. 12, line 67*);
- (ii) determining the semantic orientation of at least one of synonyms and antonyms for the words (*col. 3, line 36 to col. 12, line 67*); and
- (iii) determining the semantic orientation of morphological stems for the words (*col. 3, line 36 to col. 12, line 67*).

Conclusion

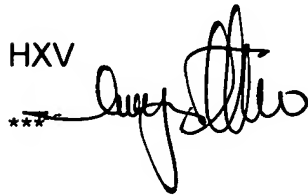
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent numbers (US 7027974; US 6859771; and US 6910004) are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen X. Vo whose telephone number is 571-272-7631. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HXV

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4/25/2007